COMMITTEE ON BIOPHYSICS

THE UNIVERSITY OF CHICAGO 5640 ELLIS AVENUE CHICAGO 37 · ILLINOIS

March 2, 1957

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Dear Josh,

Many thanks for the warm friendly letter which I found very cheering. It confirms a warm opinion I've always had of you. I sympathize with the decision making difficulties you must be having these days. Szilard thinks you should go to Stanford and hire us all.

A little scientific gossip. Anne Wright has been having a hard time crossing induced by uninduced largely because of variability in the recombination rate. We have been beset with an ordeak of trial by bad water, giving us occasional slow growth as well as poor recombination. She is now trying veresene, I'm ashamed to say. There seems to be only a slight effect of v. It seems that when the maintenance phenomenon is under control then the cross is not and vice versa. The crosses were very reproducible in lactate but the induction was not, for certain technical reasons. In succinate the induction is under control, but not the mating.

Milt has been very productive. He has found that W2241, a so-called cryptic, can be pre-induced with melibiose so that upon transfer to TMG it will be maintained and upon transfer to lactose it is not only maintained but in addition the lactose is then utilizable. If these bugs are grown in the absence of lactose they irreversibly lose ability to grow on lactose. This shouldenable us to do mighty fine quondam Spiegelman expts. Milt would like to have a melibiose minus cryptic. He can find no mel mutants of W2241 and the ML cryptics don't work. I suggested that he cross W2241 with a K-12 mel, and I wonder if you could let him have a suitable parent.

I have run across the damhdest mutagenesis. Recall that Bi,t never mutates back. Well once several years ago a slant retrieved from the deep freeze seemed to be reverted for tryp but not V₁. I passed it off as a miracle as in all our years of chemostats this was never seen. Recently thother slant was found to have reverted after recovery from the deep freeze. Upon examination of sixty more slants from the deep freeze, three more reverted slants were found. I want to examine these revertants to see what is going on. B/l, t is supposed to be missing a big piece of chromosome in the tryp region.

We have been plagued by repeated upper respiratory trouble with the children, and for two cents I'd pack the lot of them off to Florida.

Have a real wonderful time in Europe. We know you guys will enjoy it like we did, and we are eagerly waiting to see Kodachromes. By the way the French Kodak gives you a black and white negative strip with your slides if you ask for it.

Best to Esther,

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* Vernalization?